

# Work Order ID 51973

September 11, 2009 8:41:46 AM



Page 1

Item ID: D3883-1

Accept



Setup Start



Revision ID: B

Stop



Item Name: Saddle, Outboard LH

Start Date: 09/14/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 09/23/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: MF

Date: 09-09-11

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3883

B

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

0.00

HAAS CNC vertical machine #1

Memo

Program Batch No. 51973

Double check by: MF

1-Machine Step No 1 per Folio FA815 and inspect per attached Dimension Sheets

2-Machine Step No 2 per Folio FA641 and inspect per attached Dimension Sheets

3-Machine Step No 3 per Folio FA815 and inspect per Dimension Sheets

MF / SP 09/09/19

2 1-

Pro

110

QC2- Inspect parts off machine FA1/FAIB

0.00



QC

Memo

0.00

Quality Control

SP 09/09/19

2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D 3883-1 PAR #: \_\_\_\_\_ Fault Category: Prod. Machined Parts NCR: (Yes) No DQA: [Signature] Date: 05.05.25

Resolution: Scrap Disposition: Scrap. QA: N/C Closed: [Signature] Date: 05.05.25

NCR: <u>51973</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/09/19	100	One saddle have a deviation on one side of the bore $1.265^{+0.000}_{-0.000}$ . The wall of $.165^{+0.000}_{-0.000}$ IS $.125$ SO the IS $.015$ under tolerance. R.C. the feed go too fast for the Haas 2. process	CP 05.05.21 pe QSI042	<del>No replace from material.</del> Scrap part Replace Material 6101-013 Batch 46413	09/09/19	DIP 09/09/21	CP 05.05.21 pe QSI042	[Signature]
		<del>At 228 seconds the part run next time the part run on the Haas 3 only.</del> Reprocess	[Signature] 05.05.24				[Signature] 05.05.24	[Signature]

NOTE: Date &amp; initial all entries

# Work Order ID 51973

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Item ID: D3883-1

Accept



Setup Start



Revision ID: B

Item Name: Saddle, Outboard LH

Stop



Start Date: 09/14/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 09/23/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

09.09.21 (11)

2

8

Quality Control

130

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

PR 09-09-23

(2)

Hand Finishing

140

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

09/09/22

(X2)

Powder Coating

START TIME: 9:00 AM  
OVEN TEMPERATURE: 320°F  
FINISH TIME: 9:30 AM

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 51973**

September 11, 2009 8:41:46 AM



Page 3

Item ID: D3883-1

Accept



Setup Start



Revision ID: B

Stop



Item Name: Saddle, Outboard LH

Start Date: 09/14/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 09/23/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

150

QC3- Inspect Part Finish

0.00

BP 04002 23

②



QC

Memo

0.00

Quality Control

160

Identify as per dwg &amp; Stock Location: 429

0.00



Packaging

Memo

0.00

Packaging

9/9/23 @ SP

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/09/24 AJ

MF 09-09-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

September 11, 2009 8:41:45 AM

Page 1

Work Order ID: 51973



Parent Item: D3883-1RevB



Parent Item Name: Saddle, Outboard LH

Start Date: 09/14/2009

Required Date: 09/23/2009

Comments:

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6101-015RevB		Manufactured	No			100	Each	0.0000	4.0000			

Saddle Billet

Batch# B47454  
+1 Billet 6101-013 B46413

OK 09/09/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> S1993
<b>Description:</b> Saddle, Out Board RH		<b>Part Number:</b> D3883 1
<b>Inspection Dwg:</b> D3883	<b>Rev:</b> B	<b>Page 1 of 2</b>

### FIRST ARTICLE INSPECTION CHECKLIST

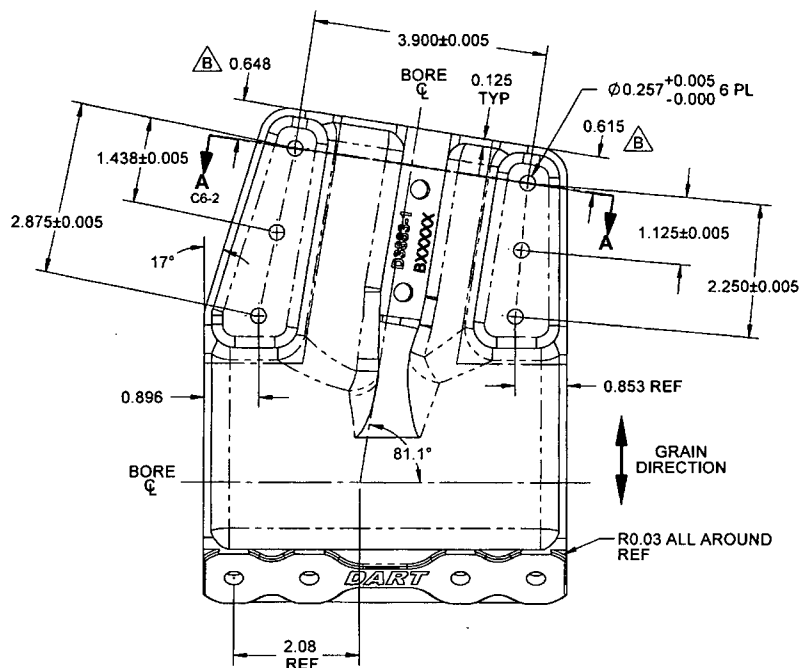
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.900	±.005	3.898	✓			
2.250	"	2.252	✓			
1.125	"	1.126	✓			
1.434	"	1.437	✓			
2.375	"	2.376	✓			
.648	±.010	.641	✓			
.615	"	.612	✓			
.250	"	.252	✓			
.165 .140		.157	✓			
2.000	±.020 -.000	2.015	✓			
.125	±.010	.125	✓			
.250	"	.252	✓			
.165 .140		.159	✓			
.250	"	.251	✓			
.110 .140		.140	✓			
2.875	±.030	2.875	✓			
.750	±.030	.775	✓			
1.265	±.020 -.000	1.273	✓			
.313	±.005 -.000	.315	✓			
1.250	±.005	1.249	✓			
2.500	"	2.500	✓			
1.250	"	1.249	✓			
.500	±.010 -.010	.498	✓			

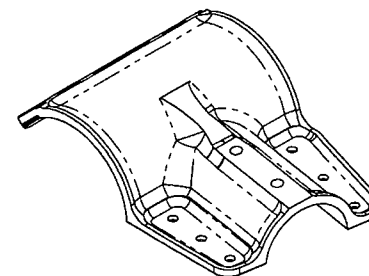
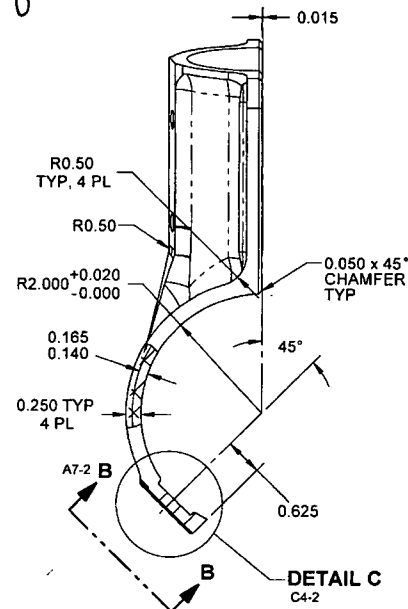
<b>Measured by:</b> JS	<b>Audited by:</b> MP	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 09/09/19	<b>Date:</b> 09.09.21	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	









# 51973  
MF  
09-09-11

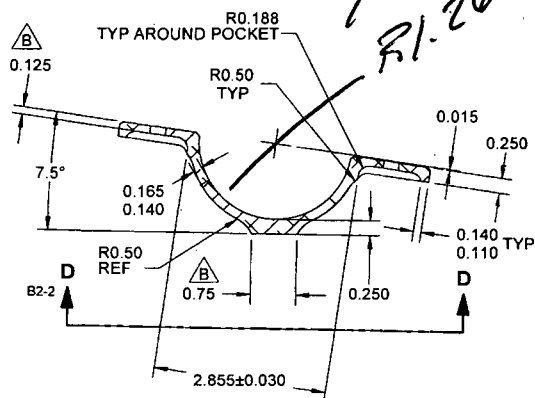


D3883-1 SADDLE, OUTBOARD LH (SHOWN)  
D3883-2 SADDLE, OUTBOARD RH (OPPOSITE)

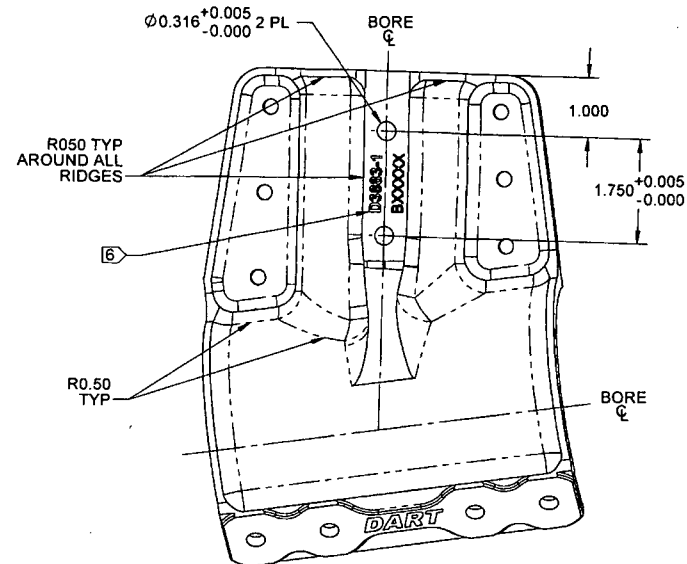
RELEASED  
07/07/15

- NOTES:**
- 1) MATERIAL: 7075-T7351 ALUMINUM PER AMS-QQ-A-250/12, OR QQ-A-250/12 OR ASTM B209 (REF DART SPEC. D6101-015)
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT GLOSS "WHITE" (4.3.5.1) PER DART QSI 005 4.3
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX. DEPTH OF 0.010 WITH A MIN. TOOL RAD OF R0.010
  - 7) WEIGHT: 1.00 lbs
  - 8) ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.250

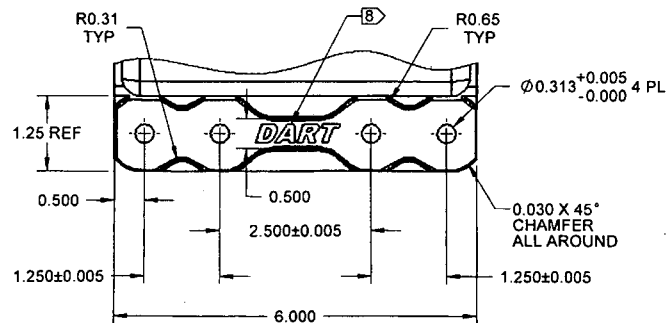
B	D6101-015 WAS D6102-015. ZN A7-1; ADD 0.648. ZN D7-1; ADD 0.615. ZN D8-1; ADD 0.125. ZN D7-2; ADD 0.060 & R0.031. ZN B5-2; 0.75 WAS 0.728. ZN C7-2	RF	09.06.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3883	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		OUTBOARD SADDLE	NTS
DATE	09.06.30	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC.	
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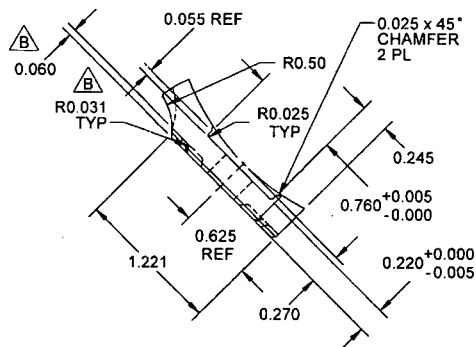
**SECTION A-A** C7-1



**VIEW D-D** C7-2



**VIEW B-B** B4-1  
(ROTATED FOR CLARITY)



**DETAIL C** B3-1  
SCALE 2X

*51973*

**RELEASED**  
*09/07/15*

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	<i>PA</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	<b>D3883</b>	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>OUTBOARD SADDLE</b>	NTS
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